

## ABSTRACT OF THE DISCLOSURE

A net-shape molded heat transfer component is provided which includes a thermally conductive core and a metallic coating for reflection of electromagnetic interference and radio frequency waves. The heat transfer component is formed by net-shape molding a core body from a thermally conductive composition, such as a polymer composition, and applying a metallic coating. The molded heat transfer part is freely convecting through the part, which makes it more efficient and has an optimal thermal configuration. Additionally, the part is shielded from electromagnetic interference and radio frequency waves, thus preventing the transfer of same into the circuitry housed by the part. In addition, the coating also seals the conductive polymer core against moisture infiltration, making the part well suited for telecommunications applications in potentially harsh environments.